



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 143082

TO: Zohreh Fay
Location: 3a61 / 3c70
Tuesday, January 25, 2005
Art Unit: 1614
Phone: 272-0573
Serial Number: 10 / 039827

From: Jan Delaval
Location: Biotech-Chem Library
Rem 1a51
Phone: 272-2504

jan.delaval@uspto.gov

Search Notes



STIC SEARCH RESULTS FEEDBACK FORM

Biotech-Chem Library

Questions about the scope or the results of the search? Contact *the searcher* or contact:

Mary Hale, Information Branch Supervisor
Remsen Bldg. 01 D86
571-272-2507

Voluntary Results Feedback Form

➤ I am an examiner in Workgroup: Example: 1610

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC-Biotech-Chem Library, Remsen Bldg.



143082

Access DB# _____

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Zohreh Farz Examiner #: 66646 Date: 1/25/05
 Art Unit: 1614 Phone Number: 871-222-0573 Serial Number: 1010391827
 Mail Box and Bldg Room Location: 3C70 Results Format Preferred (enter) PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept of the invention. Define any terms that may have a special meaning. Give examples of relevant citations, authors, etc., if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Methods and compositions for modulating alpha adrenergic receptor activity
 Inventors (please provide full names): Wen Kuiken; Carl S. Michael; Wheeler, Larry; Chow, Ken; C. L. Daniel; Fang
 Earliest Priority Filing Date: 10/19/2001

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search the compositions of claims 1-3 and the method of use of claims 4-6.
 -Thanks
 Z. Farz

Jan

C. C. P. H.
 K. K. K.

STAFF USE ONLY		Type of Search	Vendors and cost where applicable
Searcher	<u>6</u>	NA Sequence (#)	STN <input checked="" type="checkbox"/>
Searcher Phone #	<u>22804</u>	AA Sequence (#)	Dialog
Searcher Location		Structure (#)	Questel/Orbit
Date Searcher Picked Up	<u>1/25/05</u>	Bibliographic	Dr. Link
Date Completed	<u>1/25/05</u>	Litigation	Lexis/Nexis
Searcher Prep & Review Time		Fulltext	Sequence Systems
General Prep Time	<u>10</u>	Patent Family	WWW/Internet
Online Fee	<u>10</u>	Other	Other (specify)

=> fil reg

FILE 'REGISTRY' ENTERED AT 09:12:25 ON 25 JAN 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 23 JAN 2005 HIGHEST RN 819046-01-0
DICTIONARY FILE UPDATES: 23 JAN 2005 HIGHEST RN 819046-01-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

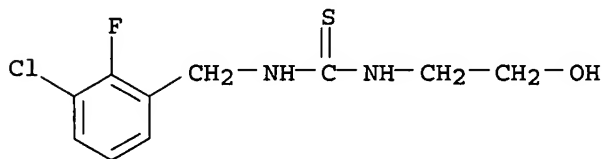
Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d ide can tot l12

L12 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2005 ACS on STN
RN 366786-91-6 REGISTRY
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI)
(CA INDEX NAME)
FS 3D CONCORD
MF C10 H12 Cl F N2 O S
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA Caplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES
(Uses)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological
study); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:332518

REFERENCE 2: 140:13072

REFERENCE 3: 138:331737

REFERENCE 4: 137:73273

REFERENCE 5: 136:363872

REFERENCE 6: 135:327361

REFERENCE 7: 135:298811

L12 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2005 ACS on STN

RN 61290-32-2 REGISTRY

CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C10 H13 F N2 O S

LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, TOXCENTER, USPAT2, USPATFULL

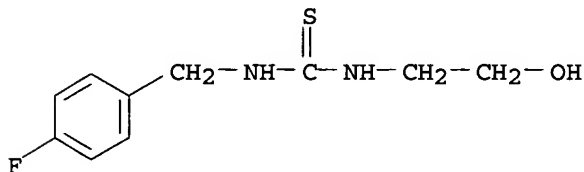
(*File contains numerically searchable property data)

DT.CA Caplus document type: Conference; Journal; Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); USES (Uses)

RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:331737

REFERENCE 2: 137:73273

REFERENCE 3: 136:363872

REFERENCE 4: 135:327361

REFERENCE 5: 135:298811

REFERENCE 6: 93:142669

REFERENCE 7: 93:132428

REFERENCE 8: 86:16440

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(FILE 'HOME' ENTERED AT 09:06:08 ON 25 JAN 2005)

SET COST OFF

FILE 'HCAPLUS' ENTERED AT 09:06:36 ON 25 JAN 2005

L1 1 S US20030092766/PN OR (US2001-039827# OR WO2002-US32571)/AP,PRN
 E CHOW K/AU
 L2 228 S E3-E19
 E CHOW KEN/AU
 L3 47 S E3-E14
 E GIL D/AU
 L4 65 S E3,E6,E9,E11-E13
 E FANG W/AU
 L5 66 S E3
 E FANG WEN/AU
 L6 17 S E3,E13
 E FANG WENKUI/AU
 L7 7 S E3,E4
 E GARST M/AU
 L8 128 S E3,E4,E7-E9
 E WHEELER L/AU
 L9 105 S E3,E4,E13-E15,E20
 E ALLERG/PA,CS
 E ALLERGA/PA,CS
 L10 941 S ALLERGAN?/PA,CS
 SEL RN L1

FILE 'REGISTRY' ENTERED AT 09:09:12 ON 25 JAN 2005

L11 5 S E1-E5
 L12 2 S L11 AND (C10H12CLFN2OS OR C10H13FN2OS)
 L13 0 S (61290-32-2 OR 366786-91-6)/CRN

FILE 'HCAOLD' ENTERED AT 09:10:40 ON 25 JAN 2005

L14 0 S L12

FILE 'HCAPLUS' ENTERED AT 09:10:44 ON 25 JAN 2005

L15 10 S L12
 L16 7 S L1-L10 AND L15
 L17 8 S L15,L16 AND (PD<=20011019 OR PRD<=20011019 OR AD<=20011019)
 L18 2 S L15,L16 NOT L17
 L19 10 S L17,L18

FILE 'USPATFULL' ENTERED AT 09:11:50 ON 25 JAN 2005

L20 8 S L12

FILE 'REGISTRY' ENTERED AT 09:12:25 ON 25 JAN 2005

=> fil uspatfull

FILE 'USPATFULL' ENTERED AT 09:12:37 ON 25 JAN 2005

CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 20 Jan 2005 (20050120/PD)

FILE LAST UPDATED: 20 Jan 2005 (20050120/ED)

HIGHEST GRANTED PATENT NUMBER: US6845512

HIGHEST APPLICATION PUBLICATION NUMBER: US2005015836

CA INDEXING IS CURRENT THROUGH 20 Jan 2005 (20050120/UPCA)

ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 20 Jan 2005 (20050120/PD)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2004

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2004

>>> USPAT2 is now available. USPATFULL contains full text of the <<<
 >>> original, i.e., the earliest published granted patents or <<<
 >>> applications. USPAT2 contains full text of the latest US <<<
 >>> publications, starting in 2001, for the inventions covered in <<<
 >>> USPATFULL. A USPATFULL record contains not only the original <<<
 >>> published document but also a list of any subsequent <<<
 >>> publications. The publication number, patent kind code, and <<<
 >>> publication date for all the US publications for an invention <<<

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>>> are displayed in the PI (Patent Information) field of USPATFULL <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc. <<<

>>> USPATFULL and USPAT2 can be accessed and searched together <<<
>>> through the new cluster USPATALL. Type FILE USPATALL to <<<
>>> enter this cluster. <<<
>>> <<<
>>> Use USPATALL when searching terms such as patent assignees, <<<
>>> classifications, or claims, that may potentially change from <<<
>>> the earliest to the latest publication. <<<

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This file contains CAS Registry Numbers for easy and accurate substance identification.

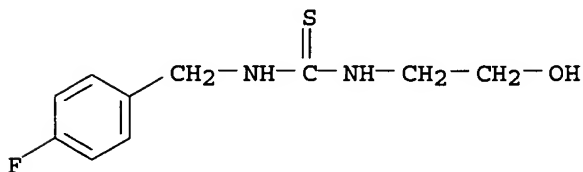
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L20 ANSWER 1 OF 8 USPATFULL on STN
AN 2004:223761 USPATFULL
TI Agent and methods for treating pain
IN Gil, Daniel W., Corona Del Mar, CA, United States
  Aoki, Kei R., Coto de Caza, CA, United States
PA Allergan, Inc., Irvine, CA, United States (U.S. corporation)
PI US 6787517 B1 20040907
AI US 2000-751053 20001229 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Riley, Jezia
LREP Stout, Uxa, Buyan & Mullins, LLP, Uxa, Frank J., Hollrigel, Greg S.
CLMN Number of Claims: 46
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1772
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Agents for treating pain, methods for producing the agents and methods
  for treating pain by administration to a patient of a therapeutically
  effective amount of the agent are disclosed. The agent may include a
  clostridial neurotoxin, a fragment or a derivative thereof, attached to
  a targeting component, wherein the targeting component is selected from
  a group consisting of compounds which selectively binds at the alpha-2B
  or alpha-2B/alpha-2C adrenergic receptor subtype(s) as compared to other
  binding sites, for example, the alpha-2A adrenergic receptor subtype.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 61290-32-2D, conjugates 366786-91-6D, conjugates
  (adrenergic receptor ligand-neurotoxin conjugates and methods for
  treating pain)
RN 61290-32-2 USPATFULL
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX
  NAME)

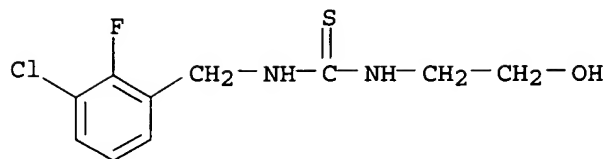
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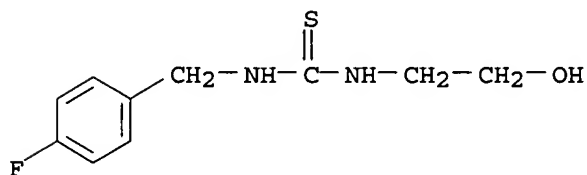
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RN 366786-91-6 USPATFULL
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI)
  (CA INDEX NAME)

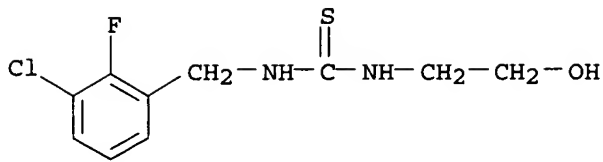
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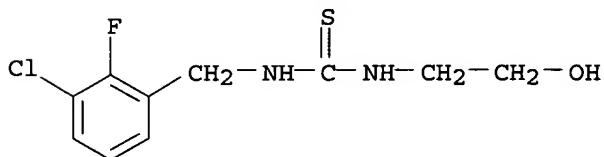
L20 ANSWER 2 OF 8 USPATFULL on STN
 AN 2004:189764 USPATFULL
 TI Agents and methods for treating pain
 IN Gil, Daniel W., Corona Del Mar, CA, UNITED STATES
 Aoki, Kei R., Coto de Caza, CA, UNITED STATES
 PA Allergan Sales, Inc., Irvine, CA, 92612 (U.S. corporation)
 PI US 2004146532 A1 20040729
 AI US 2004-791434 A1 20040301 (10)
 RLI Division of Ser. No. US 2000-751053, filed on 29 Dec 2000, PENDING
 DT Utility
 FS APPLICATION
 LREP Frank J. Uxa, Stout, Uxa, Buyan & Mullins, LLP, Suite 300, 4 Venture,
 Irvine, CA, 92618
 CLMN Number of Claims: 67
 ECL Exemplary Claim: 1
 DRWN 1 Drawing Page(s)
 LN.CNT 1856
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB Agents for treating pain, methods for producing the agents and methods
 for treating pain by administration to a patient of a therapeutically
 effective amount of the agent are disclosed. The agent may include a
 clostridial neurotoxin, a fragment or a derivative thereof, attached to
 a targeting component, wherein the targeting component is selected from
 a group consisting of compounds which selectively binds at the alpha-2B
 or alpha-2B/alpha-2C adrenergic receptor subtype(s) as compared to other
 binding sites, for example, the alpha-2A adrenergic receptor subtype.
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 IT 61290-32-2D, conjugates 366786-91-6D, conjugates
 (adrenergic receptor ligand-neurotoxin conjugates and methods for
 treating pain)
 RN 61290-32-2 USPATFULL
 CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX
 NAME)



RN 366786-91-6 USPATFULL
 CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI)
 (CA INDEX NAME)



L20 ANSWER 3 OF 8 USPATFULL on STN
 AN 2004:179142 USPATFULL
 TI Methods for the treatment of neurodegeneration
 IN Wheeler, Larry A., Irvine, CA, UNITED STATES
 Gil, Daniel W., Corona Del Mar, CA, UNITED STATES
 Donello, John E., Dana Point, CA, UNITED STATES
 PI US 2004138312 A1 20040715
 AI US 2003-680879 A1 20031007 (10)
 PRAI US 2002-417049P 20021008 (60)
 DT Utility
 FS APPLICATION
 LREP Carlos A. Fisher, ALLERGAN, INC., T2-7H, 2525 Dupont Drive, Irvine, CA, 92612
 CLMN Number of Claims: 15
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 681
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB Methods of preventing or retarding the degeneration of neurons. Also disclosed are methods for treating Alzheimer's disease or Parkinson's disease through the administration of selective alpha 2B or alpha 2B/2C receptor agonists, hereby incorporated by reference herein.
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 IT 366786-91-6
 (α2B or α2B/2C adrenoceptor agonists for treatment of neurodegeneration)
 RN 366786-91-6 USPATFULL
 CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI)
 (CA INDEX NAME)



L20 ANSWER 4 OF 8 USPATFULL on STN
 AN 2004:172660 USPATFULL
 TI Novel methods and compositions for alleviating pain
 IN Gil, Daniel W., Corona Del Mar, CA, UNITED STATES
 Donello, John E., Dana Point, CA, UNITED STATES
 PA Allergan, Inc. (U.S. corporation)
 PI US 2004132824 A1 20040708
 AI US 2003-735506 A1 20031211 (10)
 RLI Division of Ser. No. US 2002-153154, filed on 21 May 2002, PENDING
 DT Utility
 FS APPLICATION
 LREP Cathryn Campbell, McDERMOTT, WILL & EMERY, 4370 La Jolla Village Drive,

7th Floor, San Diego, CA, 92122

CLMN Number of Claims: 114

ECL Exemplary Claim: 1

DRWN 15 Drawing Page(s)

LN.CNT 2796

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a method for the long-term relief of chronic pain in a subject by activating in the subject an analgesic α -adrenergic receptor in the absence of α -2A receptor activation over a period of at least three days, such that relief of chronic pain is maintained in the absence of continued activation of said receptor. The analgesic α -adrenergic receptor can be, for example, the α -2B receptor.

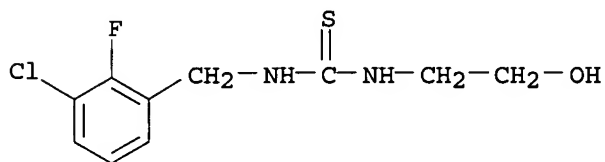
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 366786-91-6

(α -adrenoceptor activation for alleviating pain)

RN 366786-91-6 USPATFULL

CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI)
(CA INDEX NAME)



L20 ANSWER 5 OF 8 USPATFULL on STN

AN 2003:325106 USPATFULL

TI Novel methods and compositions for alleviating pain

IN Gil, Daniel W., Corona Del Mar, CA, UNITED STATES

Donello, John E., Dana Point, CA, UNITED STATES

PI US 2003229088 A1 20031211

AI US 2002-153154 A1 20020521 (10)

DT Utility

FS APPLICATION

LREP CAMPBELL & FLORES LLP, 4370 LA JOLLA VILLAGE DRIVE, 7TH FLOOR, SAN DIEGO, CA, 92122

CLMN Number of Claims: 114

ECL Exemplary Claim: 1

DRWN 15 Drawing Page(s)

LN.CNT 2794

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a method for the long-term relief of chronic pain in a subject by activating in the subject an analgesic α -adrenergic receptor in the absence of α -2A receptor activation over a period of at least three days, such that relief of chronic pain is maintained in the absence of continued activation of said receptor. The analgesic α -adrenergic receptor can be, for example, the α -2B receptor.

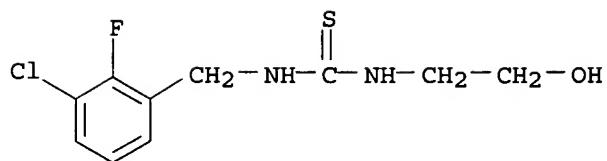
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 366786-91-6

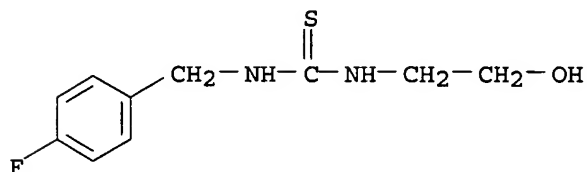
(α -adrenoceptor activation for alleviating pain)

RN 366786-91-6 USPATFULL

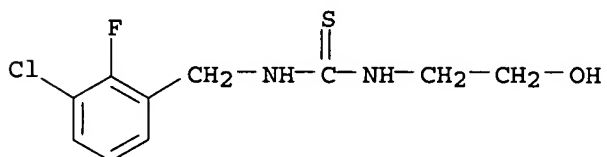
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI)
(CA INDEX NAME)



L20 ANSWER 6 OF 8 USPATFULL on STN
 AN 2003:134677 USPATFULL
 TI Methods and compositions for modulating alpha adrenergic receptor activity
 IN Chow, Ken, Newport Coast, CA, UNITED STATES
 Gil, Daniel W., Corona Del Mar, CA, UNITED STATES
 Fang, Wenkui Ken, Irvine, CA, UNITED STATES
 Garst, Michael E., Newport Beach, CA, UNITED STATES
 Wheeler, Larry A., Irvine, CA, UNITED STATES
 PI US 2003092766 A1 20030515
 AI US 2001-39827 A1 20011019 (10)
 DT Utility
 FS APPLICATION
 LREP Carlos A. Fisher, ALLERGAN, INC., T2-7H, 2525 Dupont Drive, Irvine, CA, 92612
 CLMN Number of Claims: 6
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 670
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB Methods and compositions for the treatment of pain and intraocular pressure. Particularly disclosed are new compositions for the treatment of chronic pain, glaucoma and methods for their use.
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 IT 61290-32-2P 366786-91-6P
 (thiourea derivs., preparation and use in treatment of glaucoma and pain)
 RN 61290-32-2 USPATFULL
 CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl) - (9CI) (CA INDEX NAME)



RN 366786-91-6 USPATFULL
 CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl) - (9CI)
 (CA INDEX NAME)

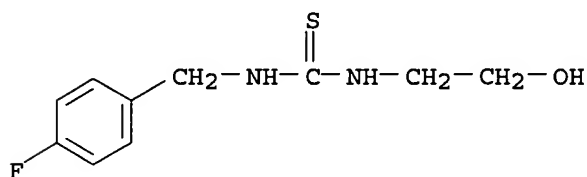


(thiourea derivs., prepn. and use in treatment of glaucoma and pain)

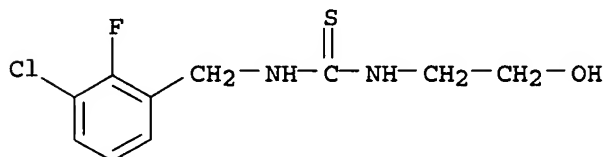
L20 ANSWER 7 OF 8 USPATFULL on STN
 AN 2002:113091 USPATFULL
 TI Methods and compositions for modulating alpha adrenergic receptor activity
 IN Chow, Ken, Newport Coast, CA, UNITED STATES
 Gil, Daniel W., Corona Del Mar, CA, UNITED STATES
 Fang, Wenkui, Irvine, CA, UNITED STATES
 Garst, Michael E., Newport Beach, CA, UNITED STATES
 Wheeler, Larry A., Irvine, CA, UNITED STATES
 PA ALLERGAN SALES, INC. (U.S. corporation)
 PI US 2002058839 A1 20020516
 US 6545182 B2 20030408
 AI US 2001-778975 A1 20010205 (9)
 RLI Continuation-in-part of Ser. No. US 2000-548315, filed on 13 Apr 2000, ABANDONED
 DT Utility
 FS APPLICATION
 LREP Carlos A. Fisher, ALLERGAN, INC., T2-2E, 2525 Dupont Drive, Irvine, CA, 92623
 CLMN Number of Claims: 18
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 782
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB Methods and compositions for the treatment of pain. Particularly disclosed are new compositions for the treatment of chronic pain, and methods for their use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 61290-32-2P 366786-91-6P
 (preparation of thiourea compds. for modulating α -adrenergic receptor activity and use in treatment of pain)
 RN 61290-32-2 USPATFULL
 CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

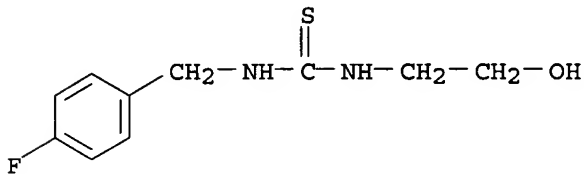


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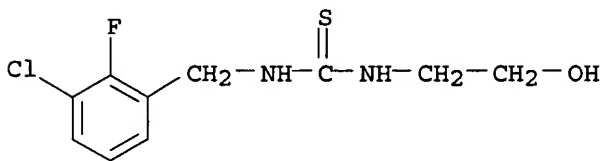


L20 ANSWER 8 OF 8 USPATFULL on STN
 AN 2001:197069 USPATFULL
 TI Methods and compositions for modulating alpha adrenergic receptor

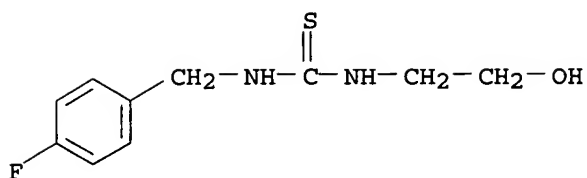
activity
 IN Chow, Ken, Newport Coast, CA, United States
 Gil, Daniel W., Corona Del Mar, CA, United States
 Fang, Wenkui Ken, Irvine, CA, United States
 Garst, Michael E., Newport Beach, CA, United States
 Wheeler, Larry A., Irvine, CA, United States
 PA Allergan Sales, Inc., Irvine, CA, United States (U.S. corporation)
 PI US 6313172 B1 20011106
 AI US 2000-548410 20000413 (9)
 DT Utility
 FS GRANTED
 EXNAM Primary Examiner: Vollano, Jean F.
 LREP Fisher, Carlos A., Baran, Robert J., Voet, Martin A.
 CLMN Number of Claims: 10
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 542
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB Methods and compositions for the treatment of pain using this area
 derivatives. Particularly disclosed are new compositions for the
 treatment of chronic pain, and methods for their use.
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 IT 61290-32-2P 366786-91-6P
 (benzylthiourea derivs. for modulating alpha adrenoceptor activity and
 their application in pain therapy)
 RN 61290-32-2 USPATFULL
 CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX
 NAME)



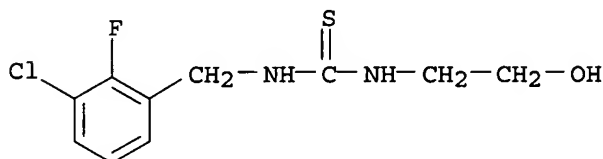
RN 366786-91-6 USPATFULL
 CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI)
 (CA INDEX NAME)



IT 61290-32-2D, alkyl esters 366786-91-6D, alkyl esters
 (benzylthiourea derivs. for modulating alpha adrenoceptor activity and
 their application in pain therapy)
 RN 61290-32-2 USPATFULL
 CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX
 NAME)



RN 366786-91-6 USPATFULL
 CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI)
 (CA INDEX NAME)



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FILE COVERS 1907 - 25 Jan 2005 VOL 142 ISS 5
 FILE LAST UPDATED: 24 Jan 2005 (20050124/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all hitstr tot 119

L19 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:331968 HCAPLUS
 DN 140:332518
 ED Entered STN: 23 Apr 2004
 TI α 2B or α 2B/2C Adrenoceptor agonists for the treatment of neurodegeneration
 IN Wheeler, Larry A.; Gil, Daniel W.; Donello, John E.
 PA Allergan, Inc., USA
 SO PCT Int. Appl., 36 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K031-17

ICS A61K031-4174; A61P025-16; A61P025-28
 CC 1-11 (Pharmacology)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2004032913	A1	20040422	WO 2003-US31809	20031007	
	W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW		
	RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
	US 2004138312	A1	20040715	US 2003-680879	20031007	
PRAI	US 2002-417049P	P	20021008			

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 2004032913	ICM	A61K031-17
		ICS	A61K031-4174; A61P025-16; A61P025-28
AB	The invention discloses methods using α 2B or α 2B/2C adrenoceptor agonists for preventing or retarding the degeneration of neurons. Also disclosed are methods for treating Alzheimer's disease or Parkinson's disease through the administration of selective α 2B or α 2B/2C adrenoceptor agonists.		
ST	neurodegeneration neuroprotectant adrenergic 2B 2C agonist; Alzheimer Parkinson drug adrenergic 2B 2C agonist		
IT	Nerve, disease (death; α 2B or α 2B/2C adrenoceptor agonists for treatment of neurodegeneration)		
IT	Brain, disease Nervous system, disease (degeneration; α 2B or α 2B/2C adrenoceptor agonists for treatment of neurodegeneration)		
IT	Brain (locus ceruleus; α 2B or α 2B/2C adrenoceptor agonists for treatment of neurodegeneration)		
IT	Cell death (neuron; α 2B or α 2B/2C adrenoceptor agonists for treatment of neurodegeneration)		
IT	Cytoprotective agents (neuroprotective; α 2B or α 2B/2C adrenoceptor agonists for treatment of neurodegeneration)		
IT	Mental activity (sedation; α 2B or α 2B/2C adrenoceptor agonists for treatment of neurodegeneration)		
IT	Brain (substantia nigra; α 2B or α 2B/2C adrenoceptor agonists for treatment of neurodegeneration)		
IT	Drug delivery systems (systemic; α 2B or α 2B/2C adrenoceptor agonists for treatment of neurodegeneration)		
IT	Ketones, biological studies Thiocarbonyl compounds RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (thiones; α 2B or α 2B/2C adrenoceptor agonists for treatment of neurodegeneration)		
IT	Brain (ventral tegmental area; α 2B or α 2B/2C adrenoceptor		

agonists for treatment of neurodegeneration)

IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
($\alpha 1$; $\alpha 2B$ or $\alpha 2B/2C$ adrenoceptor agonists for treatment of neurodegeneration)

IT Adrenoceptor agonists
($\alpha 2$ -; $\alpha 2B$ or $\alpha 2B/2C$ adrenoceptor agonists for treatment of neurodegeneration)

IT Alzheimer's disease
Anti-Alzheimer's agents
Antiparkinsonian agents
Nervous system agents
Parkinson's disease
($\alpha 2B$ or $\alpha 2B/2C$ adrenoceptor agonists for treatment of neurodegeneration)

IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
($\alpha 2B$; $\alpha 2B$ or $\alpha 2B/2C$ adrenoceptor agonists for treatment of neurodegeneration)

IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
($\alpha 2C$; $\alpha 2B$ or $\alpha 2B/2C$ adrenoceptor agonists for treatment of neurodegeneration)

IT 113775-47-6, Dexmedetomidine
RL: BSU (Biological study, unclassified); BIOL (Biological study)
($\alpha 2B$ or $\alpha 2B/2C$ adrenoceptor agonists for treatment of neurodegeneration)

IT 62-56-6D, Thiourea, derivs. 91-19-0D, Quinoxaline, derivs.
28299-33-4D, Imidazoline, derivs. 59803-98-4, Brimonidine
366786-91-6 378750-35-7D, Imidazolone, derivs. 423773-41-5
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
($\alpha 2B$ or $\alpha 2B/2C$ adrenoceptor agonists for treatment of neurodegeneration)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Allergan Inc; WO 02076950 A 2002 HCAPLUS

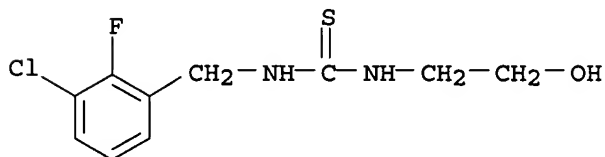
(2) Allergan Inc; WO 03099795 A 2003 HCAPLUS

(3) Allergan Sales Inc; WO 9928300 A 1999 HCAPLUS

IT 366786-91-6
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
($\alpha 2B$ or $\alpha 2B/2C$ adrenoceptor agonists for treatment of neurodegeneration)

RN 366786-91-6 HCAPLUS

CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI)
(CA INDEX NAME)



L19 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:950846 HCAPLUS

DN 140:13072

ED Entered STN: 07 Dec 2003

TI Novel methods and compositions for alleviating pain

IN Gil, Daniel W.; Donello, John E.
 PA Allergan, Inc., USA
 SO PCT Int. Appl., 129 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K031-538
 ICS A61K031-4164; A61K031-4168; A61K031-4178; A61K031-498; A61K031-137;
 A61P029-00
 CC 1-11 (Pharmacology)
 Section cross-reference(s): 25

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003099289	A2	20031204	WO 2003-US13057	20030423
	WO 2003099289	A3	20040318		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 2003229088	A1	20031211	US 2002-153154	20020521
	US 2004132824	A1	20040708	US 2003-735506	20031211
PRAI	US 2002-153154	A	20020521		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003099289	ICM	A61K031-538
	ICS	A61K031-4164; A61K031-4168; A61K031-4178; A61K031-498; A61K031-137; A61P029-00

AB The invention provides a method for the long-term relief of chronic pain in a subject by activating in the subject an analgesic α -adrenergic receptor in the absence of α -2A receptor activation over a period of at least three days, such that relief of chronic pain is maintained in the absence of continued activation of said receptor. The analgesic α -adrenergic receptor can be, for example, the α -2B receptor.

ST pain alleviation analgesic alpha adrenoceptor agonist antagonist

IT Pain

IT Skin, disease
(allodynia; α -adrenoceptor activation for alleviating pain)

IT Nerve, disease
(diabetic neuropathy; α -adrenoceptor activation for alleviating pain)

IT Viscera
(disease, pain; α -adrenoceptor activation for alleviating pain)

IT Behavior
(exploratory; α -adrenoceptor activation for alleviating pain)

IT Mutation
(homozygous point mutation at α -2A receptor locus, Asp79 to Asn mutation; α -adrenoceptor activation for alleviating pain)

IT Drug delivery systems
(injections, s.c., minipumps; α -adrenoceptor activation for alleviating pain)

IT Nerve, disease
(injury; α -adrenoceptor activation for alleviating pain)

IT Intestine, disease
(irritable bowel syndrome; α -adrenoceptor activation for alleviating pain)

IT Behavior
(motor; α -adrenoceptor activation for alleviating pain)

IT Nerve, disease
Pain
(neuralgia; α -adrenoceptor activation for alleviating pain)

IT Drug delivery systems
(oral; α -adrenoceptor activation for alleviating pain)

IT Arthritis
Inflammation
Neoplasm
(pain; α -adrenoceptor activation for alleviating pain)

IT Pain
(postoperative; α -adrenoceptor activation for alleviating pain)

IT Nerve
(sciatic; α -adrenoceptor activation for alleviating pain)

IT Pain
(visceral; α -adrenoceptor activation for alleviating pain)

IT Animal
Mus
(wild; α -adrenoceptor activation for alleviating pain)

IT Adrenoceptor agonists
(α -; α -adrenoceptor activation for alleviating pain)

IT Analgesia
Analgesics
Headache
Hypnotics and Sedatives
Hypotension
(α -adrenoceptor activation for alleviating pain)

IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α 1A; α -adrenoceptor activation for alleviating pain)

IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α 1B; α -adrenoceptor activation for alleviating pain)

IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α 1D; α -adrenoceptor activation for alleviating pain)

IT Adrenoceptor antagonists
(α 2-, α -2A; α -adrenoceptor activation for alleviating pain)

IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α 2A; α -adrenoceptor activation for alleviating pain)

IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α 2B, agonists; α -adrenoceptor activation for alleviating pain)

IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α 2C, agonists; α -adrenoceptor activation for alleviating pain)

IT 62-56-6, Thiourea, biological studies 62-56-6D, Thiourea, derivs.
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α -adrenoceptor activation for alleviating pain)

IT 51-41-2, Norepinephrine 4205-90-7, Clonidine 51322-75-9, Tizanidine
59803-98-4, Brimonidine 113775-47-6, Dexmedetomidine 159091-94-8
168570-37-4 226571-24-0 226571-24-0D, stereoisomers
366786-91-6 423773-40-4 423773-40-4D, stereoisomers
423773-41-5 423773-41-5D, stereoisomers 628730-19-8 628730-19-8D,
stereoisomers 628730-30-3 628730-35-8 628730-36-9 629628-13-3
629628-13-3D, stereoisomers 629628-14-4 629628-15-5 629628-16-6
629628-17-7 629628-18-8 630410-33-2, BRL 48962 630410-33-2D, BRL
48962, esters, amides and stereoisomers

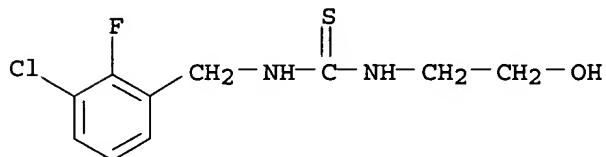
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(α -adrenoceptor activation for alleviating pain)

IT 366786-91-6

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(α -adrenoceptor activation for alleviating pain)

RN 366786-91-6 HCAPLUS

CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI)
(CA INDEX NAME)



L19 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:334962 HCAPLUS

DN 138:331737

ED Entered STN: 02 May 2003

TI Methods and compositions for modulating α adrenergic receptor
activity, and therapeutic use thereof

IN Chow, Ken; Gil, Daniel W.; Fang, Wenkui Ken;
Garst, Michael E.; Wheeler, Larry A.

PA Allergan, Inc., USA

SO PCT Int. Appl., 35 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61P027-06

ICS A61K031-17; A61K031-222

CC 1-12 (Pharmacology)

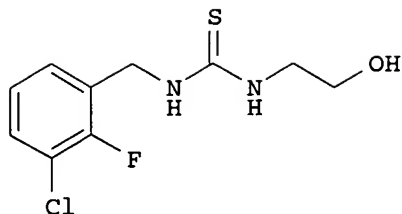
Section cross-reference(s): 63

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003035178	A1	20030501	WO 2002-US32571	20021011 <--
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2003092766	A1	20030515	US 2001-39827	20011019 <--
PRAI US 2001-39827	A	20011019	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003035178	ICM	A61P027-06
	ICS	A61K031-17; A61K031-222
US 2003092766	ECLA	A61K031/17
OS MARPAT 138:331737		
GI		



AB Methods and compns. are discloses for the treatment of pain and intraocular pressure. Particularly disclosed are compns. for the treatment of chronic pain, glaucoma, and methods for their use. Compds. of the invention include e.g. I (preparation given).

ST thiourea deriv prepn chronic pain glaucoma; alpha adrenergic ligand therapeutic pain intraocular pressure

IT Pain
(chronic; thiourea derivs., preparation and use in treatment of glaucoma and pain)

IT Analgesics
Antiglaucoma agents
Drug delivery systems
Glaucoma (disease)
Pain
(thiourea derivs., preparation and use in treatment of glaucoma and pain)

IT **61290-32-2P 366786-91-6P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(thiourea derivs., preparation and use in treatment of glaucoma and pain)

IT **366786-91-6D**, alkyl esters
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thiourea derivs., preparation and use in treatment of glaucoma and pain)

IT 141-43-5, Ethanolamine, reactions 2740-88-7, 4-Fluorobenzyl isothiocyanate 366787-56-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(thiourea derivs., preparation and use in treatment of glaucoma and pain)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

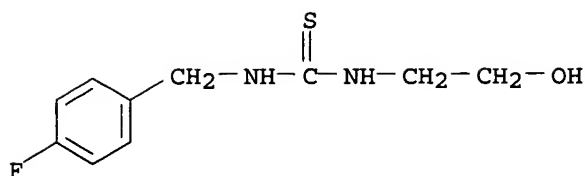
RE

(1) Allergan Sales Inc; WO 0178702 A 2001 HCAPLUS
(2) Allergan Sales Inc; WO 0178703 A 2001 HCAPLUS
(3) Egyt Gyogyszervegyeszeti Gyar; GB 1499485 A 1978 HCAPLUS
(4) Reiter, J; EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY 1980, V15(1), P41 HCAPLUS

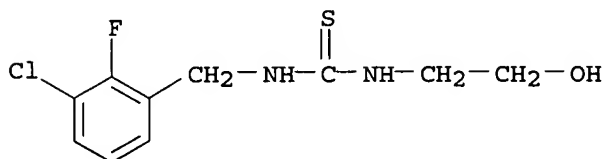
IT **61290-32-2P 366786-91-6P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(thiourea derivs., preparation and use in treatment of glaucoma and pain)

RN 61290-32-2 HCAPLUS

CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 366786-91-6 HCAPLUS
 CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI)
 (CA INDEX NAME)



RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (thiourea derivs., prepn. and use in treatment of glaucoma and pain)

L19 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:521523 HCAPLUS
 DN 137:73273
 ED Entered STN: 12 Jul 2002
 TI Adrenergic receptor ligand-neurotoxin conjugates and methods for treating
 pain
 IN Gil, Daniel W.; Aoki, Kei Roger
 PA Allergan Sales, Inc., USA
 SO PCT Int. Appl., 76 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K039-00
 CC 1-11 (Pharmacology)
 Section cross-reference(s): 63
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002053177	A2	20020711	WO 2001-US48651	20011214 <--
WO 2002053177	A3	20030918		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 6787517	B1	20040907	US 2000-751053	20001229 <--
CA 2433332	AA	20020711	CA 2001-2433332	20011214 <--
EP 1363674	A2	20031126	EP 2001-990212	20011214 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2004146532	A1	20040729	US 2004-791434	20040301 <--
PRAI US 2000-751053	A	20001229	<--	

WO 2001-US48651	W	20011214
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CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2002053177	ICM	A61K039-00
US 6787517	ECLA	A61K035/74; A61K038/16C; A61K047/48H4; A61K047/48R2D; A61K047/48T2C12P4; A61K047/48T4B18; C07K016/18 <--
US 2004146532	ECLA	A61K035/74; A61K038/16C; A61K047/48H4; A61K047/48R2D; A61K047/48T2C12P4; A61K047/48T4B18; C07K016/18 <--

OS MARPAT 137:73273

AB Agents for treating pain, methods for producing the agents, and methods for treating pain by administration to a patient of a therapeutically effective amount of the agent, are disclosed. The agent may include a clostridial neurotoxin, a fragment or a derivative thereof, attached to a targeting component, wherein the targeting component is selected from a group consisting of compds. which selectively binds at the $\alpha 2b$ or $\alpha 2b/\alpha 2c$ adrenergic receptor subtype(s) as compared to other binding sites, e.g. the $\alpha 2a$ adrenergic receptor subtype.

ST adrenergic receptor ligand neurotoxin conjugate analgesic

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (MBP (maltose-binding protein), fusion products; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Analgesics

Cytoplasm

Drug delivery systems

Human

Ribosome

(adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Amino acids, biological studies

Gene

Neurotransmitters

RL: BSU (Biological study, unclassified); BIOL (Biological study) (adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Antibodies and Immunoglobulins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Pain

Skin, disease

(allodynia; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Toxins

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (butyricum, conjugates; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Pain

(chronic; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Hemocyanins

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (conjugates; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Peptides, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (conjugates; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Proteins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(conjugates; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Viscera
(disease, pain; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Drug delivery systems
(injections, i.m.; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Drug delivery systems
(injections, s.c.; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Biological transport
(intracellular; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Drug delivery systems
(intrathecal; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Nerve, disease
(neuropathy, neuropathic pain; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Pain
(referred; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(saporins, conjugates; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Hydrocarbons, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(spacer; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Toxins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tetanus, conjugates; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Pain
(visceral; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Antigens
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
($\alpha 2b$ receptor second extracellular loop; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
($\alpha 2B$; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
($\alpha 2C$; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT 440645-44-3
RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
(adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT 19216-56-9D, Prazosin, conjugates 61290-32-2D, conjugates 67339-62-2D, ARC 239, conjugates 81167-16-0D, Imiloxan, conjugates 93384-43-1D, Botulin A, conjugates 93384-44-2D, Botulin B, conjugates 93384-46-4D, Botulin D, conjugates 93384-47-5D, Botulin E, conjugates

107231-12-9D, Botulin, conjugates 107231-13-0D, Botulin C1, conjugates
 107231-15-2D, Botulin F, conjugates 107231-16-3D, Botulin G, conjugates
366786-91-6D, conjugates

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (adrenergic receptor ligand-neurotoxin conjugates and methods for
 treating pain)

IT 147-85-3, L-Proline, biological studies

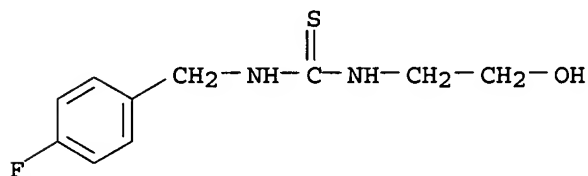
RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (proline-containing polypeptide, spacer; adrenergic receptor
 ligand-neurotoxin conjugates and methods for treating pain)

IT **61290-32-2D**, conjugates **366786-91-6D**, conjugates

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (adrenergic receptor ligand-neurotoxin conjugates and methods for
 treating pain)

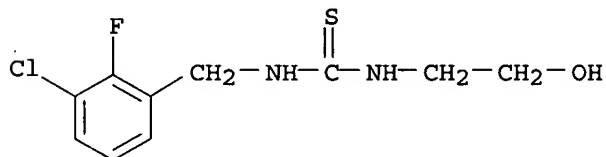
RN 61290-32-2 HCAPLUS

CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX
 NAME)



RN 366786-91-6 HCAPLUS

CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI)
 (CA INDEX NAME)



L19 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:369027 HCAPLUS

DN 136:363872

ED Entered STN: 18 May 2002

TI Preparation of thiourea compounds for modulating α -adrenergic
 receptor activity and use in the treatment of pain

IN Chow, Ken; Gil, Daniel W.; Fang, Wenkui;

Garst, Michael E.; Wheeler, Larry A.

PA Allergan Sales, Inc., USA

SO U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 548,315,
 abandoned.

CODEN: USXXCO

DT Patent

LA English

IC ICM A61K031-17

ICS C07C275-24

NCL 564047000

CC 1-11 (Pharmacology)

Section cross-reference(s): 25, 63

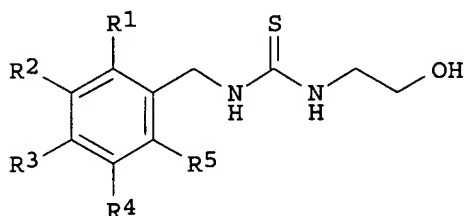
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002058839	A1	20020516	US 2001-778975	20010205 <--
	US 6545182	B2	20030408		
PRAI	US 2000-548315	B2	20000413	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2002058839	ICM	A61K031-17
	ICS	C07C275-24
	NCL	564047000

OS MARPAT 136:363872
GI



AB Methods and compns. are disclosed which use thiourea compds. I (R1, R5 = halo, alkyl, alkoxy, etc.; R2, R4 = halo, alkyl, alkoxy, etc.; R3 = F, H), and alkyl esters thereof, for the treatment of pain. Preparation of I [R1 = F; R2 = Cl; R3-R5 = H] which showed EC50 of 16 nM and 457 nM at α 2B and α 2C receptor in RSAT assay, was given. Particularly disclosed are compns. for the treatment of chronic pain, and methods for their use.

ST thiourea prepn adrenergic receptor modulator; analgesic allodynia thiourea prepn

IT Pain
Skin, disease
(allodynia; preparation of thiourea compds. for modulating α -adrenergic receptor activity and use in treatment of pain)

IT Drug delivery systems
(oral; preparation of thiourea compds. for modulating α -adrenergic receptor activity and use in treatment of pain)

IT Analgesics
Drug delivery systems
Human
Structure-activity relationship
(preparation of thiourea compds. for modulating α -adrenergic receptor activity and use in treatment of pain)

IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α 2A; preparation of thiourea compds. for modulating α -adrenergic receptor activity and use in treatment of pain)

IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α 2B; preparation of thiourea compds. for modulating α -adrenergic receptor activity and use in treatment of pain)

IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α 2C; preparation of thiourea compds. for modulating α -adrenergic receptor activity and use in treatment of pain)

IT 61290-32-2P 61290-44-6P 61290-46-8P 61290-47-9P
74548-54-2P 74787-66-9P 366786-78-9P 366786-79-0P 366786-80-3P
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366786-86-9P 366786-87-0P 366786-89-2P 366786-90-5P

366786-91-6P 366786-92-7P 366786-93-8P 366786-94-9P
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 366787-16-8P 366787-17-9P 366787-18-0P 366787-19-1P 366787-20-4P
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 366787-37-3P 366787-38-4P 366787-39-5P 366787-40-8P 366787-41-9P
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 366787-53-3P 366787-54-4P 366787-55-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(preparation of thiourea compds. for modulating α -adrenergic receptor
 activity and use in treatment of pain)

IT 366787-56-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction; preparation of thiourea compds. for modulating α -adrenergic
 receptor activity and use in treatment of pain)

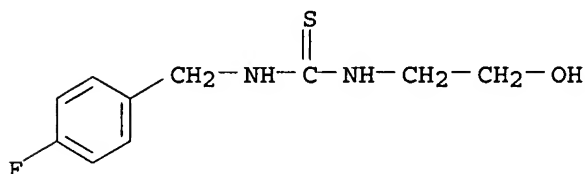
IT 61290-32-2P 366786-91-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(preparation of thiourea compds. for modulating α -adrenergic receptor
 activity and use in treatment of pain)

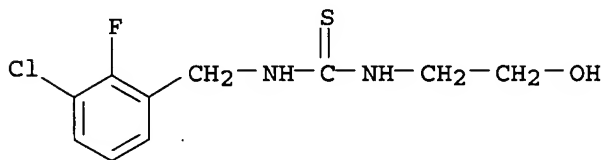
RN 61290-32-2 HCAPLUS

CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX
 NAME)



RN 366786-91-6 HCAPLUS

CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI)
 (CA INDEX NAME)



L19 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:780662 HCAPLUS

DN 135:327361

ED Entered STN: 26 Oct 2001

TI Methods and compositions using benzylthiourea derivatives for modulating
 alpha adrenergic receptor activity

IN Chow, Ken; Gil, Daniel W.; Fang, Wenkui Ken;
 Garst, Michael E.; Wheeler, Larry A.

PA Allergan Sales, Inc., USA

SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K031-00

CC 1-11 (Pharmacology)

Section cross-reference(s): 25

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001078703	A2	20011025	WO 2001-US11843	20010411 <--
	WO 2001078703	A3	20020321		
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	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
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	CA 2406057	AA	20011025	CA 2001-2406057	20010411 <--
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	JP 2003530430	T2	20031014	JP 2001-576004	20010411 <--
	NZ 522027	A	20041126	NZ 2001-522027	20010411 <--
PRAI	US 2000-548410	A	20000413	<--	
	WO 2001-US11843	W	20010411	<--	

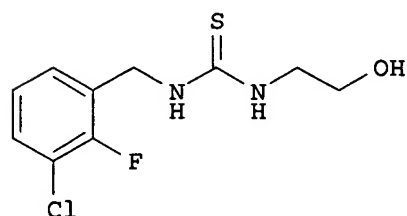
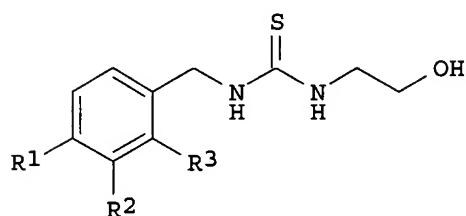
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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WO 2001078703	ICM	A61K031-00
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OS MARPAT 135:327361

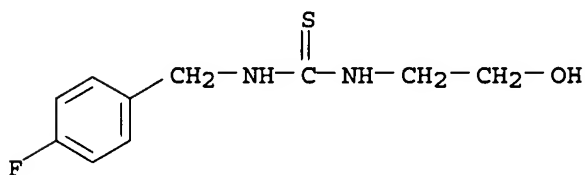
GI



AB The invention discloses benzylthiourea derivs. I (R1, R3 = F, H; R2 = Cl, H; with provisos, and alkyl esters thereof) as α 2-adrenergic

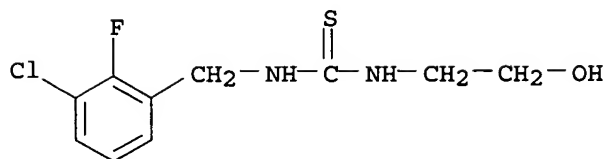
receptor modulators. The invention also describes the synthesis of a compound II (wherein R1= H, R2= Cl and R3 = F). The effects of these disclosed compds. on acute and chronic pain, their sedative action and their cardiovascular effects are described.

- ST alpha adrenergic receptor modulator benzylthiourea deriv prepn analgesic;
sedation analgesic benzylthiourea deriv adrenoceptor modulator
- IT Pain
Skin, disease
(allodynia; benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)
- IT Analgesics
Drug delivery systems
(benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)
- IT Pain
(chronic; benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)
- IT Drug delivery systems
(oral; benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)
- IT Adrenoceptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(α-; benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)
- IT 61290-32-2P 61290-44-6P 366786-91-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)
- IT 61290-32-2D, alkyl esters 366786-91-6D, alkyl esters
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)
- IT 141-43-5, Ethanolamine, reactions 446-48-0, 2-Fluoro benzyl bromide 2740-88-7, 4-Fluoro benzyl isothiocyanate 366787-56-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)
- IT 61290-32-2P 366786-91-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)
- RN 61290-32-2 HCAPLUS
- CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

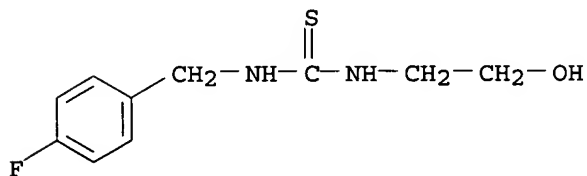


- RN 366786-91-6 HCAPLUS
- CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI)

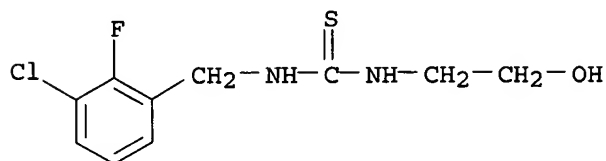
(CA INDEX NAME)



IT 61290-32-2D, alkyl esters 366786-91-6D, alkyl esters
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)
 RN 61290-32-2 HCAPLUS
 CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 366786-91-6 HCAPLUS
 CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



L19 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:780661 HCAPLUS
 DN 135:298811
 ED Entered STN: 26 Oct 2001
 TI Thiourea compounds for modulating α -adrenergic receptor activity, preparation, compositions, and use in the treatment of pain
 IN Chow, Ken; Gil, Daniel W.; Fang, Wenkui Ken; Garst, Michael E.; Wheeler, Larry A.
 PA Allergan Sales, Inc., USA
 SO PCT Int. Appl., 41 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K031-00
 CC 1-11 (Pharmacology)
 Section cross-reference(s): 25, 63
 FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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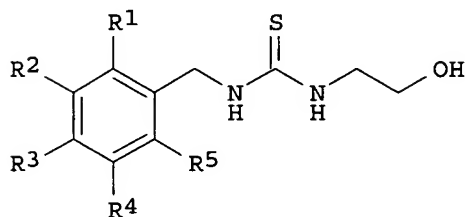
PI WO 2001078702 A2 20011025 WO 2001-US11842 20010411 <--
 WO 2001078702 A3 20020321
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 CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
 HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
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 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
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 CA 2405796 AA 20011025 CA 2001-2405796 20010411 <--
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 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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 JP 2003530429 T2 20031014 JP 2001-576003 20010411 <--
 PRAI US 2000-548315 A 20000413 <--
 WO 2001-US11842 W 20010411 <--

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001078702	ICM	A61K031-00

OS MARPAT 135:298811

GI



I

AB Methods and compns. are disclosed which use thiourea compds. I (R1, R2, R4, R5 = H, OH, Cl-3 alkyl, etc.; R3 = H, F), and alkyl esters thereof, for the treatment of pain. Particularly disclosed are compns. for the treatment of chronic pain, and methods for their use.

ST thiourea deriv prepn adrenergic receptor modulator; chronic pain treatment

thiourea deriv

IT Pain

Skin, disease

(allodynia; thiourea compds. for modulating α -adrenergic receptor activity, preparation, compns., and use in treatment of pain)

IT Drug delivery systems

(oral; thiourea compds. for modulating α -adrenergic receptor activity, preparation, compns., and use in treatment of pain)

IT Analgesics

Drug delivery systems

Structure-activity relationship

(thiourea compds. for modulating α -adrenergic receptor activity, preparation, compns., and use in treatment of pain)

IT Adrenoceptors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(α 2A; thiourea compds. for modulating α -adrenergic receptor activity, preparation, compns., and use in treatment of pain)

IT Adrenoceptors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(α 2B; thiourea compds. for modulating α -adrenergic receptor activity, preparation, compns., and use in treatment of pain)

IT Adrenoceptors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(α 2C; thiourea compds. for modulating α -adrenergic receptor activity, preparation, compns., and use in treatment of pain)

IT 141-43-5, Ethanalamine, reactions 366787-56-6

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; thiourea compds. for modulating α -adrenergic receptor activity, preparation, compns., and use in treatment of pain)

IT 61290-44-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(thiourea compds. for modulating α -adrenergic receptor activity, preparation, compns., and use in treatment of pain)

IT 61290-32-2 61290-46-8 61290-47-9 74548-54-2 74787-66-9

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366786-83-6 366786-84-7 366786-85-8 366786-86-9 366786-87-0

366786-89-2 366786-90-5 **366786-91-6** 366786-92-7

366786-93-8 366786-94-9 366786-95-0 366786-96-1 366786-97-2

366786-98-3 366786-99-4 366787-00-0 366787-01-1 366787-02-2

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366787-40-8 366787-41-9 366787-42-0 366787-43-1 366787-45-3

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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(thiourea compds. for modulating α -adrenergic receptor activity, preparation, compns., and use in treatment of pain)

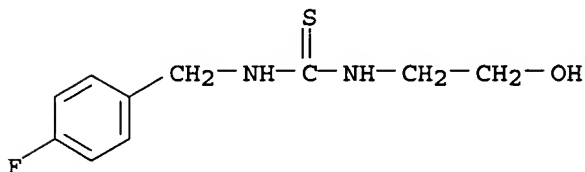
IT 61290-32-2 **366786-91-6**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(thiourea compds. for modulating α -adrenergic receptor activity, preparation, compns., and use in treatment of pain)

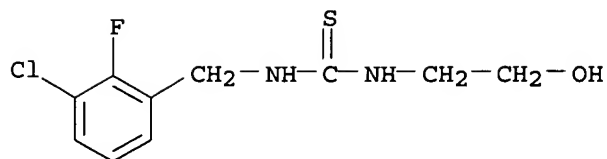
RN 61290-32-2 HCAPLUS

CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

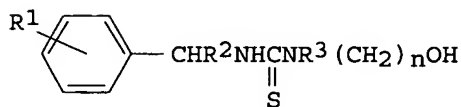


RN 366786-91-6 HCAPLUS

CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



L19 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1980:542669 HCAPLUS
 DN 93:142669
 ED Entered STN: 12 May 1984
 TI Synthesis of new biologically active thiourea derivatives
 AU Reiter, J.; Toldy, L.; Schafer, I.; Szondy, E.; Szekely, J.; Dunai-Kovacs, Z.; Borsy, J.; Lukovics, I.
 CS Vyzk. Ustav Farm. Chem., Budapest, Hung.
 SO Rozvoj Farm. Ramci Ved.-Tech. Revoluce, Sb. Prednasek Sjezdu Cesk. Farm. Spol., 7th (1979), Meeting Date 1977, 121-30 Publisher: Univ. Karlova, Prague, Czech.
 CODEN: 43OFAO
 DT Conference
 LA Czech
 CC 1-3 (Pharmacodynamics)
 GI



I

AB Twenty-four thioureas [I; R1 = H, F, CF3, or Me; R2 = H or C1-3 alkyl; R3 = H, Me, Et, (CH2)3Me, or (CH2)2OH; n = 2-4] were prepared and screened for diuretic activity in rats. Many I had greater saluretic activity than hydrochlorothiazide and produced a higher Na+-to-K+ ratio in the urine than did the latter. The most active compound was I (R1 = 2-F; R2 = Me; R3 = H; n = 2) [61290-50-4]. Structure-diuretic activity relations are discussed. Most I had hypotensive activity in cats. A related compound, 1-(4-chlorobenzyl)-3-methyl-3-(2-hydroxyethyl)thiourea [61290-76-4], also was one of the most active in this respect.

ST phenylalkylthiourea prepn diuretic antihypertensive; structure activity
 phenylalkylthiourea diuretic; thiourea deriv diuretic antihypertensive

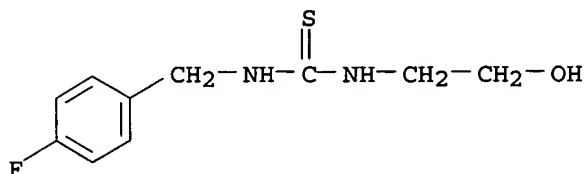
IT Antihypertensives
 Diuretics
 (thiourea derivs.)

IT Molecular structure-biological activity relationship
 (diuretic, of thiourea derivs.)

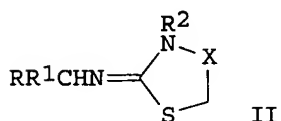
IT 61290-76-4
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (antihypertensive activity of)

IT 6098-41-5 29146-63-2 61290-32-2 61290-42-4 61290-44-6
 61290-46-8 61290-47-9 61290-48-0 61290-50-4 74548-41-7
 74548-42-8 74548-43-9 74548-44-0 74548-45-1 74548-46-2
 74548-47-3 74548-48-4 74548-49-5 74548-50-8 74548-51-9
 74548-52-0 74548-53-1 74548-54-2 74548-55-3
 RL: BIOL (Biological study)

(antihypertensive and diuretic activity of)
 IT 61290-32-2
 RL: BIOL (Biological study)
 (antihypertensive and diuretic activity of)
 RN 61290-32-2 HCAPLUS
 CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



L19 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1980:532428 HCAPLUS
 DN 93:132428
 ED Entered STN: 12 May 1984
 TI Synthesis of new "benzyl"-thiourea derivatives and their cyclic analogs with diuretic and saluretic activity
 AU Reiter, J.; Toldy, L.; Schaefer, I.; Szondy, E.; Borsy, J.; Lukovits, I.
 CS Inst. Drug Res., Budapest, Hung.
 SO European Journal of Medicinal Chemistry (1980), 15(1), 41-53
 CODEN: EJMCA5; ISSN: 0009-4374
 DT Journal
 LA English
 CC 28-15 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 6, 25
 OS CASREACT 93:132428
 GI



AB RR1CHNHCSNR2R3 [I; R = optionally substituted Ph; R1 = H, Me, Et, Pr, CHMe2, (CH2)6Me, cyclopropyl; R2 = H, Me, Et, Bu, cyclohexyl, CH2CH2OH; R3 = (CH2)3OH, CH2CHMeOH, CH2CMe2OH, CH2CH2OH, allyl, CH2CMe:CH2, CH2CH2OH] and their cyclic derivs. II (X = CH2, CH2CH2, CH2CHMe, CH2CMe2, CH2CH2, CH2CH:CH) with diuretic and saluretic activity were prepared. Thus, RR1CHNH2 were converted to RR1CHNCS or RR1CHNHCS2Me, which were treated with R2R3NH to give I. Acidic cyclization of I using HCl gave II. The quant. structure activity relationships for I and II were determined using the Free-Wilson approach.
 ST benzylthiourea diuretic saluretic prepn; benzylthiazolidine diuretic prepn; thiazolidine benzyl diuretic prepn; benzylamine isothiocyanation; isothiocyanates alkylamine reaction; carbaminodithioate alkylamine reaction; thiourea benzyl prepn cyclization
 IT Diuretics
 (benzylthioureas and benzylaminothiazolidines)
 IT Molecular structure-biological activity relationship
 (diuretic, of benzylthioureas and benzylaminothiazolidines)
 IT 13578-57-9P 13677-15-1P 13846-58-7P 30480-73-0P 61290-51-5P

61290-53-7P	61290-56-0P	61290-60-6P	61290-65-1P	61290-67-3P
61290-78-6P	61290-83-3P	61290-89-9P	61290-93-5P	68983-54-0P
72239-29-3P	72239-32-8P	72239-33-9P	74548-48-4P	74548-55-3P
74606-09-0P	74787-61-4P	74787-63-6P	74787-64-7P	74787-66-9P
74787-70-5P	74787-71-6P	74787-72-7P	74787-74-9P	74787-81-8P
74787-86-3P	74787-87-4P	74787-90-9P	74787-91-0P	74787-92-1P
74787-93-2P	74787-98-7P	74787-99-8P	74788-00-4P	74788-01-5P
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74788-29-7P	74788-30-0P	74788-31-1P	74788-32-2P	74788-33-3P
74788-34-4P	74788-35-5P	74788-36-6P	74788-37-7P	74788-38-8P
74788-39-9P	74788-40-2P	74788-41-3P	74788-42-4P	74788-43-5P
74788-47-9P	74788-49-1P	74788-50-4P	74788-51-5P	74788-52-6P
74788-53-7P	74788-54-8P	74788-55-9P	74788-56-0P	74866-89-0P

143543-79-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and diuretic and saluretic activity of)

IT 74788-81-1P 74788-82-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

IT	6098-41-5P	13677-11-7P	61290-32-2P	61290-40-2P	61290-42-4P
	61290-45-7P	61290-46-8P	61290-47-9P	61290-48-0P	61290-50-4P
	61290-52-6P	61290-58-2P	61290-61-7P	61290-69-5P	61290-71-9P
	61290-72-0P	61290-73-1P	61290-74-2P	61290-75-3P	61290-76-4P
	61290-77-5P	61290-79-7P	61290-80-0P	61290-81-1P	61290-84-4P
	61290-91-3P	61290-92-4P	74548-43-9P	74548-44-0P	74548-45-1P
	74548-46-2P	74548-49-5P	74548-50-8P	74548-51-9P	74548-54-2P
	74787-60-3P	74787-62-5P	74787-65-8P	74787-67-0P	74787-68-1P
	74787-69-2P	74787-73-8P	74787-75-0P	74787-76-1P	74787-77-2P
	74787-78-3P	74787-79-4P	74787-82-9P	74787-83-0P	74787-84-1P
	74787-85-2P	74787-88-5P	74787-89-6P	74787-94-3P	74787-95-4P
	74787-96-5P				

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

(preparation, cyclization, and diuretic activity of)

IT 61290-44-6P 74548-41-7P 74548-42-8P 74548-53-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

(preparation, cyclization, and diuretic and saluretic activity of)

IT	2740-88-7	3694-45-9	4426-82-8	4478-92-6	16735-69-6	18967-42-5
	22623-45-6	61290-96-8	63351-94-0	64382-80-5	74788-57-1	
	74788-58-2	74788-59-3	74788-60-6	74788-61-7	74788-62-8	
	74788-63-9	74788-64-0	74788-65-1	74788-66-2	74788-67-3	
	74788-68-4	74788-69-5	74788-70-8	74788-71-9	74788-72-0	
	74788-73-1	74788-74-2	74788-75-3	74788-76-4	74788-77-5	
	74788-78-6	74788-79-7	74788-80-0			

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with amines)

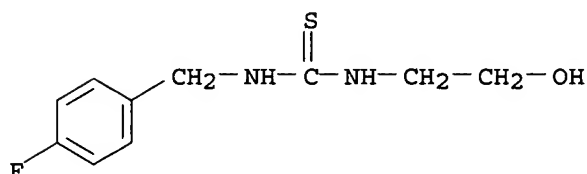
IT	78-96-6	96-20-8	107-11-9	109-83-1	110-73-6	111-42-2, reactions
	111-75-1	141-43-5, reactions	156-87-6	2842-38-8	2854-16-2	
	2878-14-0	13325-10-5	42055-15-2			

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with isothiocyanate or carbaminodithioates)

IT	89-93-0	89-97-4	89-99-6	100-46-9, reactions	100-82-3	102-49-8
	104-86-9	140-75-0	403-40-7	618-36-0	2740-83-2	2941-19-7
	2941-20-0	3048-01-9	3300-51-4	3959-07-7	5763-61-1	6298-96-0
	6299-02-1	6668-27-5	7409-30-5	19293-58-4	23459-38-3	51586-20-0
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	74788-46-8					

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with isothiocyanates or carbonodithioates)
 IT 61290-32-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation, cyclization, and diuretic activity of)
 RN 61290-32-2 HCAPLUS
 CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX
 NAME)



L19 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1977:16440 HCAPLUS
 DN 86:16440
 ED Entered STN: 12 May 1984
 TI Benzylthiourea diuretics
 IN Reiter, Jozsef; Toldy, Lajos; Borsi, Jozsef; Schaefer, Inge; Szondy,
 Eleonora; Szekely, Jozsef
 PA E. Gy. T. Gyogyszervegyeszeti Gyar, Hung.
 SO Ger. Offen., 49 pp.
 CODEN: GWXXBX

DT Patent
 LA German
 IC C07C157-02
 CC 25-21 (Noncondensed Aromatic Compounds)
 FAN. CNT 1

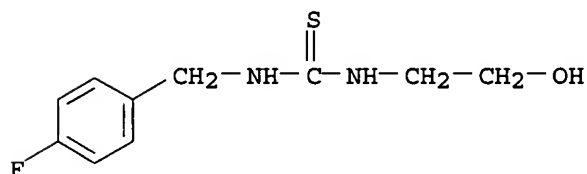
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2610865	A1	19760930	DE 1976-2610865	19760315 <--
	SU 795462	D	19810107	SU 1975-2333906	19750312 <--
	IL 49194	A1	19800916	IL 1976-49194	19760310 <--
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	BE 839502	A1	19760701	BE 1976-165107	19760312 <--
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	NL 7602670	A	19760916	NL 1976-2670	19760315 <--
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PRAI	HU 1975-GO1303	A	19750314		<--

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 2610865	IC	C07C157-02

AB RR1C6H3CHR2NHCSNR3R4 [I; R, R1 = H, OMe, CF3, Cl, etc.; R2 = C1-7 alkyl; R3 = H, alkyl, CH2CH2OH; R4 = allyl, CH2CH2OH, (CH2)3OH] were prepared by reacting R3R4NH with RR1C6H3CHR2X (X = NCS, NHCSCl).. Thus, 4-FC6H4CH2NCS in CHCl3 was added to HOCH2CH2NH2 in CHCl3 at 0°, and the mixture was refluxed for 1 hr to give 100% 4-FC6H4CH2NHCSNHCH2CH2OH. About 65 other I were prepared, useful as diuretics, as shown by tests on rats.

ST diuretic benzylthiourea; thiourea benzyl diuretic
 IT Diuretics
 ((hydroxyalkyl)benzylthioureas)
 IT 13677-11-7P **61290-32-2P** 61290-40-2P 61290-42-4P
 61290-44-6P 61290-45-7P 61290-46-8P 61290-47-9P 61290-48-0P
 61290-50-4P 61290-51-5P 61290-52-6P 61290-53-7P 61290-56-0P
 61290-58-2P 61290-59-3P 61290-60-6P 61290-61-7P 61290-65-1P
 61290-67-3P 61290-69-5P 61290-70-8P 61290-71-9P 61290-72-0P
 61290-73-1P 61290-74-2P 61290-75-3P 61290-76-4P 61290-77-5P
 61290-78-6P 61290-79-7P 61290-80-0P 61290-81-1P 61290-82-2P
 61290-83-3P 61290-84-4P 61290-89-9P 61290-91-3P 61290-92-4P
 61290-93-5P 61319-75-3P 74548-41-7P 74548-42-8P 74548-43-9P
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 74548-50-8P 74787-60-3P 74787-61-4P 74787-62-5P 74787-63-6P
 74787-70-5P 74787-72-7P 74787-81-8P 74787-82-9P 74787-83-0P
 74787-84-1P 74787-85-2P 74787-86-3P 74787-89-6P 74787-94-3P
 74787-95-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 IT 61290-97-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, and reaction with amines)
 IT 463-71-8 2740-88-7 61290-95-7 61290-96-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with amines)
 IT 140-75-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with carbon disulfide)
 IT 75-15-0, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with fluorobenzylamine)
 IT 109-83-1
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with isothiocyanates)
 IT 2941-19-7
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with thiophosgene)
 IT 141-43-5, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (with aryl isothiocyanates or thiocarbamoyl chloride)
 IT **61290-32-2P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 61290-32-2 HCAPLUS
 CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



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